

TOWN OF CALEDON
PLANNING
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**Tree Inventory and Preservation Plan Report
6034 Mayfield Road
Caledon, ON**

Prepared For:

Adesso Design Inc.
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Prepared By:



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Jackson Arboriculture Inc. Project No. 229

Introduction

Jackson Arboriculture Inc. was retained by Adesso Design Inc. to complete a Tree Inventory and Preservation Plan report for a development application for a property situated at 6034 Mayfield Road in Caledon, Ontario. The proposed development includes the construction of two industrial structures and associated parking.

Methodology

The following work plan was utilized during the completion of this study:

- Prepare field mapping (overlay topo survey/site plan/aerial photography);
- Complete a site visit to collect tree inventory information for all trees 10 cm in diameter and larger situated on subject property, on neighbouring property within 6 m and in the road allowance;
- Data entry, mapping, and completion of a preservation planning analysis for trees included in the tree inventory; and,
- Document the findings in a Tree Inventory and Preservation Plan report in accordance with the Town of Caledon's Terms of Reference for Arborist Reports, Tree Preservation Plans and Tableland Tree Removal Compensation.

Tree Inventory

The tree inventory was completed on the 22nd of June 2021. All trees included in the inventory were visually assessed based on the following parameters:

Tree #: A number assigned to each tree correlating to the tree inventory and the Tree Protection Plan Sheet L-1 as prepared by Adesso Design Inc.

Species: Common and scientific species names.

DBH: Diameter of the tree stem, measured at 1.4 m from the ground.

Condition: The health of the tree considering trunk integrity, crown structure and crown vigour; each rated as poor, fair or good.

Dripline: The distance from the stem to the tips of the live branches.

Crown Class: The position of the tree crown within the surrounding tree canopy, assessed as either dominant, co-dominant, intermediate or suppressed.

Location: The property on which the tree is situated.

Comments: Any additional notes relevant to the tree or site conditions.

The trees included in the inventory are identified with numbers 1-58. Trees were located by the topographic survey provided and handheld GPS unit.

Existing Conditions

The subject property is comprised of active agricultural fields and regenerating cultural meadow. The site is bound by commercial development to the north and to the east, Mayfield Road to the south and Airport Road to the west.

The tree inventory documented a total of 58 trees situated on subject property, within the road allowance and on neighbouring property within 6 m of the property boundaries. The trees included in the inventory appear to be comprised of naturally occurring trees with some landscape plantings.

Trees included in the inventory are comprised of Eastern Red Cedar (*Juniperus virginiana*), Manitoba Maple (*Acer negundo*), Trembling Aspen (*Populus tremuloides*), White Elm (*Ulmus Americana*), Scots Pine (*Pinus sylvestris*), Blue Spruce (*Picea pungens*), White Spruce (*Picea abies*), Eastern Cottonwood (*Populus deltoides*) and Silver Maple (*Acer saccharinum*). Refer to Table 1 for the complete tree inventory and Sheet L-1 for tree locations.

Proposed Development

The proposed development includes the construction of two industrial buildings and associated asphalt parking. Access to the development is proposed from Airport Road to the west and Mayfield Road to the south.

Discussion and Analysis

A preservation planning analysis was completed on each tree individually considering the impacts from the proposed development and many other factors including, but not limited to, tree condition, species, DBH and the existing site conditions. The impacts from the proposed development will occur where tree roots conflict with construction machinery during earthworks, grading, servicing and foundation excavation.

During the preservation planning analysis the dripline distance was utilized to determine the potential impacts to each tree. Where appreciable encroachment is required within the dripline, tree removal will likely be required.

Tree Removal

The removal of Trees 1-44 and 54 will be required to accommodate the proposed development.

Tree Preservation

The preservation of Trees 45-53 and 55-58 will be possible with the use of appropriate tree protection measures. The tree protection fence must be installed prior to the commencement of construction (earthworks/grading) to ensure that the trees identified for preservation are not adversely affected by the impacts of the proposed development.

The tree protection fence must be installed at the dripline of trees identified for preservation. Refer to Sheet L-1 for the location of required tree protection fence, Sheet L-2 for the tree protection fence detail and further tree protection plan notes.

Tableland Tree Removal Compensation

The removal of healthy tableland trees will require compensation in the form of tree plantings or a cash-in-lieu payment to the Town. A total of 45 trees included in the tree inventory will required removal to accommodate the proposed development. Of those 45 trees, 26 are considered to be healthy. As per the Town's Terms of Reference, a total of 35 compensation trees will be required to offset the removal of the 26 healthy tableland trees. Refer to Table 2 for the Tree Compensation Table.

Tree plantings must be a minimum of 70 mm caliper for deciduous trees or 200 cm height for coniferous trees to be considered as compensation by the Town.

Summary and Recommendations

Jackson Arboriculture Inc. was retained by Adesso Design Inc. to complete a Tree Inventory and Preservation Plan report for a development application for a property situated at 6034 Mayfield Road in Caledon, Ontario. A tree inventory was conducted and reviewed in the context of the proposed development plan.

The findings of the study indicate a total of 58 trees situated on subject property, in the road allowances and on neighbouring property within 6 m of the property boundaries. The removal of 45 trees will be required to accommodate the proposed development and 35 compensation tree plantings will be required.

The following recommendations are made to ensure trees identified for preservation are not impacted by the proposed development:

- Refer to Sheet L-1 for the location of prescribed tree protection fencing, and Sheet L-2 for the tree protection fence detail and further tree protection plan notes.
- Tree protection fence must be installed prior to the commencement of construction/earthworks.
- Once tree protection fence has been installed it must not be moved, relocated or altered in any way (unless repairing fallen fence etc.) for the duration of the construction period.
- No intrusion into an area identified on Sheet L-1 as a tree preservation zone (TPZ) is allowed at anytime during construction.

- No storage of machinery, construction debris, materials, waste or any other items is allowed within a TPZ.
- Any tree branches (and roots) that conflict with proposed development must be pruned by a Certified Arborist in accordance with acceptable arboricultural practice.
- Tree protection fencing should be inspected prior to, during, and after construction is complete to ensure that tree protection fence remains intact and in good repair throughout the stages of development.

Respectfully submitted,
Jackson Arboriculture Inc.

Jeremy Jackson

Jeremy Jackson, H.B.Sc.,
ISA Certified Arborist #ON-1089A
GIS Analyst

Limitations of Assessment

It is our policy to attach the following limitations of assessment to ensure that the client, municipalities and agencies are fully aware of what is technically and professionally realistic when visually assessing and retaining trees.

The assessment of the trees presented in this report has been made using accepted arboricultural techniques. These include a visual examination of the above ground parts of each tree for structural defects, scars, external indications of decay such as fungal fruiting bodies, evidence of attack by insects, discoloured foliage, the condition of any visible root structures, the degree and direction of any lean, the general condition of the trees and the surrounding site, and the proximity of property and people.

Notwithstanding the recommendations and conclusions made in this report, it must be realized that trees are living organisms and their health and vigour constantly change. They are not immune to changes in site conditions, or seasonal variations in the weather conditions, including severe storms with high-speed winds.

While reasonable efforts have been made to ensure that the trees recommended for retention are healthy no guarantees are offered, or implied, that these trees, or any parts of them, will remain standing. It is both professionally and practically impossible to predict with absolute certainty the behaviour of any single tree or group of trees or their component parts in all circumstances. Inevitably a standing tree will always pose some risk. Most trees have the potential for failure under adverse weather conditions, and the risk can only be eliminated if the tree is removed.

Although every effort has been made to ensure that this assessment is reasonably accurate, trees should be re-assessed periodically. The assessment presented in this report is valid as the time of the inspection.

Table 1. Tree Inventory

Location: Airport Rd & Mayfield Rd Caledon

Date: 22 June 2021

Surveyors: JJJ

Tree #	Common Name	Scientific Name	DBH	TI	CS	CV	DL	CC	Location	Comments	Recommendation
1	Eastern Red Cedar (Juniper)	<i>Juniperus virginiana</i>	28	G	G	G	3	CD	Subject Property		Remove
2	Manitoba Maple	<i>Acer negundo</i>	59	F	F	F	4	CD	Subject Property	Stem wound, seam, broken branches	Remove
3	Manitoba Maple	<i>Acer negundo</i>	69, 53	F	F	F	5	D	Subject Property	Union at 0.4 m, heavy stem wound, 20% crown dieback, tagged 1539	Remove
4	Manitoba Maple	<i>Acer negundo</i>	26, 18	FG	G	G	3	D	Subject Property	Union at 0.4 m	Remove
5	Manitoba Maple	<i>Acer negundo</i>	18, 15, 22, 18	PF	PF	PF	4	D	Subject Property	Union at ground, 2 stems failed and lying on the ground	Remove
6	Manitoba Maple	<i>Acer negundo</i>	50	F	G	G	4	CD	Subject Property	Stem wound	Remove
7	Manitoba Maple	<i>Acer negundo</i>	28, 24	FG	G	G	4	CD	Subject Property	Union at 0.3 m, epicormic branching	Remove
8	Manitoba Maple	<i>Acer negundo</i>	13	G	FG	G	3	I	Subject Property	Bowed, grapevine competition	Remove
9	Manitoba Maple	<i>Acer negundo</i>	46	FG	G	G	4	CD	Subject Property	Union at 1.6 m, epicormic branching	Remove
10	Trembling Aspen	<i>Populus tremuloides</i>	10, 7	FG	FG	FG	2	CD	Subject Property	Union at ground, 7 cm stem dead	Remove
11	Trembling Aspen	<i>Populus tremuloides</i>	10	G	G	G	2	CD	Subject Property		Remove
12	Manitoba Maple	<i>Acer negundo</i>	13, 15	FG	G	G	3	CD	Subject Property	Union at ground	Remove
13	Trembling Aspen	<i>Populus tremuloides</i>	20	F	FG	G	3	CD	Subject Property	Crook	Remove
14	Manitoba Maple	<i>Acer negundo</i>	12	F	F	FG	3	CD	Subject Property	Stem wound at flare, bowed/lean	Remove
15	Manitoba Maple	<i>Acer negundo</i>	15	FG	FG	G	2	CD	Subject Property	Lean	Remove
16	Trembling Aspen	<i>Populus tremuloides</i>	28	FG	G	G	3	CD	Subject Property	Stem wound at flare	Remove
17	Trembling Aspen	<i>Populus tremuloides</i>	21	G	F	F	3	CD	Subject Property	30% crown dieback	Remove
18	Trembling Aspen	<i>Populus tremuloides</i>	13	G	G	G	2	CD	Subject Property		Remove
19	Trembling Aspen	<i>Populus tremuloides</i>	17	FG	F	F	3	CD	Subject Property	Bowed east, 20% crown dieback	Remove
20	Trembling Aspen	<i>Populus tremuloides</i>	18	F	P	P	3	CD	Subject Property	60% crown dieback	Remove
21	Trembling Aspen	<i>Populus tremuloides</i>	16, 12	FG	G	G	3	CD	Subject Property	Union at ground	Remove
22	Trembling Aspen	<i>Populus tremuloides</i>	10, 15, 16, 9	FG	FG	FG	3	CD	Subject Property	Union at ground, 10% crown dieback	Remove
23	Trembling Aspen	<i>Populus tremuloides</i>	12	G	G	G	2	CD	Subject Property		Remove
24	Trembling Aspen	<i>Populus tremuloides</i>	12	G	G	G	2	CD	Subject Property	Lean	Remove
25	Trembling Aspen	<i>Populus tremuloides</i>	14	PF	F	F	3	CD	Subject Property	Heavy lean	Remove
26	Trembling Aspen	<i>Populus tremuloides</i>	11	G	FG	FG	2	CD	Subject Property	Canker	Remove
27	Manitoba Maple	<i>Acer negundo</i>	13, 14, 12	F	FG	G	3	CD	Subject Property	Union at 0.5 m, included trailer fender	Remove
28	Manitoba Maple	<i>Acer negundo</i>	21, 18, 17, 14, 14	FG	G	G	4	CD	Subject Property		Remove

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29	Manitoba Maple	<i>Acer negundo</i>	12	PF	F	F	2	CD	Subject Property	Heavy stem wound at flare	Remove
30	Trembling Aspen	<i>Populus tremuloides</i>	11, 9	FG	G	G	2	CD	Subject Property	Union at ground	Remove
31	Manitoba Maple	<i>Acer negundo</i>	9, 11	FG	FG	FG	2	CD	Subject Property	Union at ground, epicormic branching	Remove
32	Manitoba Maple	<i>Acer negundo</i>	15, 15	FG	G	G	3	CD	Subject Property	Union at 0.5 m	Remove
33	Manitoba Maple	<i>Acer negundo</i>	12, 21	FG	FG	FG	3	CD	Subject Property	Union at ground, 10% crown dieback	Remove
34	Manitoba Maple	<i>Acer negundo</i>	28, 25, 23	F	FG	G	5	CD	Subject Property	Union at ground, epicormic branching	Remove
35	Manitoba Maple	<i>Acer negundo</i>	22, 24	FG	G	G	5	CD	Subject Property	Union at 0.6 m	Remove
36	Manitoba Maple	<i>Acer negundo</i>	15, 9	FG	FG	FG	3	CD	Subject Property	Union at ground, broken branches, epicormic branching	Remove
37	Manitoba Maple	<i>Acer negundo</i>	10, 20	FG	F	F	4	CD	Subject Property	Union at ground, 30% crown dieback	Remove
38	Manitoba Maple	<i>Acer negundo</i>	24	P	P	P	4	CD	Subject Property	Lean, ~50% crown dieback	Remove
39	Manitoba Maple	<i>Acer negundo</i>	13	P	P	P	3	CD	Subject Property	Union at ground, lean, heavy stem wound, 2 dead stems	Remove
40	Manitoba Maple	<i>Acer negundo</i>	~5, 8, 10	P	PF	PF	3	CD	Subject Property	Heavy lean, failed stem	Remove
41	Manitoba Maple	<i>Acer negundo</i>	9, 13	FG	G	G	3	D	Subject Property	Union at 1.2 m	Remove
42	Manitoba Maple	<i>Acer negundo</i>	20, 21, 21	FG	FG	F	4	D	Subject Property	Union at ground, stem wound, 20% crown dieback	Remove
43	Manitoba Maple	<i>Acer negundo</i>	12, 6, 7, 5, 7	F	FG	FG	3	D	Subject Property	Union at ground	Remove
44	Manitoba Maple	<i>Acer negundo</i>	9, 11	FG	G	G	3	D	Subject Property	Union at ground	Remove
45	White Elm	<i>Ulmus americana</i>	36	F	F	FG	4	D	Neighbouring Property	Broken branches, stem wound	Preserve
46	White Elm	<i>Ulmus americana</i>	40	G	G	G	4	D	Neighbouring Property	Tagged 1578	Preserve
47	Scots Pine	<i>Pinus sylvestris</i>	~25	G	G	G	3	D	Neighbouring Property		Preserve
48	Scots Pine	<i>Pinus sylvestris</i>	~25	G	G	G	4	D	Neighbouring Property		Preserve
49	Blue Spruce	<i>Picea pungens</i>	20	G	G	G	2.5	D	Neighbouring Property		Preserve
50	Blue Spruce	<i>Picea pungens</i>	~18	G	G	G	3	D	Neighbouring Property		Preserve
51	White Spruce	<i>Picea glauca</i>	~25	G	G	G	3	CD	Neighbouring Property		Preserve
52	White Spruce	<i>Picea glauca</i>	~18	G	G	G	2	CD	Neighbouring Property		Preserve
53	White Spruce	<i>Picea glauca</i>	~30	G	FG	FG	3	CD	Neighbouring Property	Sparse crown	Preserve
54	Eastern Cottonwood	<i>Populus deltoides</i>	13	G	G	G	2	CD	Subject Property		Remove
55	Eastern Cottonwood	<i>Populus deltoides</i>	~13	FG	G	G	2	CD	Neighbouring Property	Union at 1.6 m	Preserve
56	Silver Maple	<i>Acer saccharinum</i>	~32	G	G	G	5	CD	Neighbouring Property		Preserve
57	Silver Maple	<i>Acer saccharinum</i>	~45	G	G	G	7	CD	Neighbouring Property		Preserve
58	White Spruce	<i>Picea glauca</i>	~20	G	G	G	3	CD	Neighbouring Property		Preserve

Codes		
DBH	Diameter at Breast Height	(cm)
TI	Trunk Integrity	(G, F, P)
CS	Crown Structure	(G, F, P)
CV	Crown Vigour	(G, F, P)
CC	Crown Class	(D, CD, I)
Con.	Condition	(G, F, P)
DL	Dripline	(m)
D	Dominant	
CD	Co-dominant	
G	Good	
F	Fair	
P	Poor	

Table 2. Tree Compensation Table

Tree #	Common Name	Scientific Name	DBH	Condition	Recommendation	Compensation Trees
1	Eastern Red Cedar (Juniper)	<i>Juniperus virginiana</i>	28	G	Remove	2
2	Manitoba Maple	<i>Acer negundo</i>	59	F	Remove	N/A
3	Manitoba Maple	<i>Acer negundo</i>	69, 53	F	Remove	N/A
4	Manitoba Maple	<i>Acer negundo</i>	26, 18	FG	Remove	2
5	Manitoba Maple	<i>Acer negundo</i>	18, 15, 22, 18	PF	Remove	N/A
6	Manitoba Maple	<i>Acer negundo</i>	50	F	Remove	N/A
7	Manitoba Maple	<i>Acer negundo</i>	28, 24	FG	Remove	2
8	Manitoba Maple	<i>Acer negundo</i>	13	FG	Remove	1
9	Manitoba Maple	<i>Acer negundo</i>	46	FG	Remove	3
10	Trembling Aspen	<i>Populus tremuloides</i>	10, 7	FG	Remove	1
11	Trembling Aspen	<i>Populus tremuloides</i>	10	G	Remove	1
12	Manitoba Maple	<i>Acer negundo</i>	13, 15	FG	Remove	1
13	Trembling Aspen	<i>Populus tremuloides</i>	20	F	Remove	N/A
14	Manitoba Maple	<i>Acer negundo</i>	12	F	Remove	N/A
15	Manitoba Maple	<i>Acer negundo</i>	15	FG	Remove	1
16	Trembling Aspen	<i>Populus tremuloides</i>	28	FG	Remove	2
17	Trembling Aspen	<i>Populus tremuloides</i>	21	F	Remove	N/A
18	Trembling Aspen	<i>Populus tremuloides</i>	13	G	Remove	1
19	Trembling Aspen	<i>Populus tremuloides</i>	17	F	Remove	N/A
20	Trembling Aspen	<i>Populus tremuloides</i>	18	P	Remove	N/A
21	Trembling Aspen	<i>Populus tremuloides</i>	16, 12	FG	Remove	1
22	Trembling Aspen	<i>Populus tremuloides</i>	10, 15, 16, 9	FG	Remove	1
23	Trembling Aspen	<i>Populus tremuloides</i>	12	G	Remove	1
24	Trembling Aspen	<i>Populus tremuloides</i>	12	G	Remove	1
25	Trembling Aspen	<i>Populus tremuloides</i>	14	PF	Remove	N/A
26	Trembling Aspen	<i>Populus tremuloides</i>	11	FG	Remove	1
27	Manitoba Maple	<i>Acer negundo</i>	13, 14, 12	F	Remove	N/A
28	Manitoba Maple	<i>Acer negundo</i>	21, 18, 17, 14, 14	FG	Remove	2
29	Manitoba Maple	<i>Acer negundo</i>	12	PF	Remove	N/A
30	Trembling Aspen	<i>Populus tremuloides</i>	11, 9	FG	Remove	1
31	Manitoba Maple	<i>Acer negundo</i>	9, 11	FG	Remove	1
32	Manitoba Maple	<i>Acer negundo</i>	15, 15	FG	Remove	1
33	Manitoba Maple	<i>Acer negundo</i>	12, 21	FG	Remove	2
34	Manitoba Maple	<i>Acer negundo</i>	28, 25, 23	F	Remove	N/A
35	Manitoba Maple	<i>Acer negundo</i>	22, 24	FG	Remove	2
36	Manitoba Maple	<i>Acer negundo</i>	15, 9	FG	Remove	1
37	Manitoba Maple	<i>Acer negundo</i>	10, 20	F	Remove	N/A
38	Manitoba Maple	<i>Acer negundo</i>	24	P	Remove	N/A
39	Manitoba Maple	<i>Acer negundo</i>	13	P	Remove	N/A

40	Manitoba Maple	<i>Acer negundo</i>	~5, 8, 10	P	Remove	N/A
41	Manitoba Maple	<i>Acer negundo</i>	9, 13	FG	Remove	1
42	Manitoba Maple	<i>Acer negundo</i>	20, 21, 21	F	Remove	N/A
43	Manitoba Maple	<i>Acer negundo</i>	12, 6, 7, 5, 7	F	Remove	N/A
44	Manitoba Maple	<i>Acer negundo</i>	9, 11	FG	Remove	1
54	Eastern Cottonwood	<i>Populus deltoides</i>	13	G	Remove	1
Total:						35